



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

JHD

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,774	04/12/2001	Selim Shlomo Rakib	TER-002.3P D4	9660
7590	07/07/2004		EXAMINER	
RONALD C. FISH			NGUYEN, BRIAN D	
FALK, VESTAL & FISH			ART UNIT	PAPER NUMBER
16590 OAK VIEW CIRCLE			2661	8
MORGAN HILL, CA 95037				

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/759,774	RAKIB ET AL.	
	Examiner	Art Unit	
	Brian D Nguyen	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on the application filed 1/12/01.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 84-96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 86,92,94 and 96 is/are rejected.
- 7) Claim(s) 85,88-91,93 and 95 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 April 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.6.7</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 1-13 been renumbered 84-96.

2. Claims 93 and 94 are objected to because of the following informalities:

Claim 93, line 8, it is suggested to replace “FFE and DFE equalizers” with ---feed forward equalizers (FFE) and decision feedback equalizers (DFE)---.

Claim 94, line 8, “final tap weight coefficients” seems to refer back to “final tap weight coefficients” in line 7. If this is true, it is suggested to change “final tap weight coefficients” in line 8 to ---the final tap weight coefficients---.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 86, 92, 94, and 96 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 86 recites the limitation "the ranging process" in lines 5 and 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 92 recites the limitation "said predetermined code" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 94 recites the limitation "the new equalization filter coefficients" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 96 recites the limitation "the guardband" in line 19 and "the correct predetermined number of gaps" in line 26 and "said central transceiver" in line 35. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 84 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerakoulis (5,838,669).

Regarding claims 84 and 87, Gerakoulis discloses a process carried out to achieve frame synchronization in a digital data communication system having a plurality of physical distributed remote transceivers (ground radio stations) transmitting frames of the same size on the same frequency on a shared medium to a headend transceiver (satellite radio station) comprising the remote transceiver transmitting arranging signal to the headend and the headend sends a message

Art Unit: 2661

to the remote transceiver and the remote transceiver adjust the time delay in order to synchronize the headend with the remote transceivers (see col. 6, lines 31-39; claim 6). Gerakoulis does not specifically disclose the remote transceiver transmits identifying information to the headend transceiver to identify the remote transceiver. However, this feature is well known in the art and is obvious because in order to communicate with a specific remote transceiver, the headend transceiver must know the identification of the remote transceiver. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit the identification of the remote transceiver to the headend transceiver so that data packet belong to the remote transceiver can be transmitted to and from the remote transceiver.

Allowable Subject Matter

7. Claims 85, 88-91, and 95 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 86 and 92-94 would be allowable if rewritten to overcome the objection(s) and/or the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claim 96 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

Art Unit: 2661

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cloutier (5,966,387), Raith et al (6,430,417), Kondo (5,722,080), Hulvet (5,844,622), and Garrison et al (5,910,945) teach synchronization methods.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



6/23/04

**BRIAN NGUYEN
PRIMARY EXAMINER**